

Polarization Maintaining C-Lens Fiber Collimator



Description

The Polarization Maintaining C-Lens Fiber Collimator is a high-precision optical device designed to convert divergent light from a polarization maintaining (PM) fiber into a well-collimated beam while preserving the input polarization state. By integrating a high-quality C-lens with accurately aligned PM fiber, this collimator ensures excellent beam quality, low insertion loss, and high polarization extinction ratio (PER).

Features

- Low Insertion Loss
- Long Working Distance
- High Reliability
- Compact Size

Applications

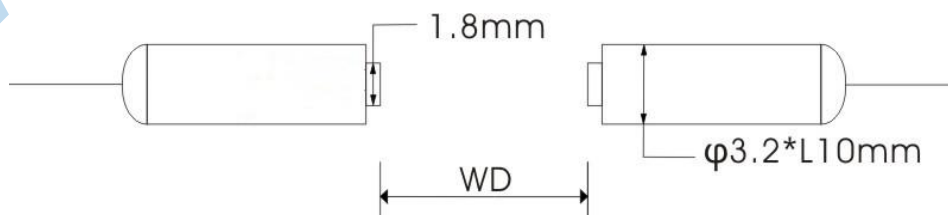
- Fiber Laser
- Fiber Amplifier
- Optical Communication Field
- LiDAR

Specifications

Parameter	Unit	Value						
Center Wavelength	nm	532	630/670	780/830/850	980/1030/1064	1310	1480/1550	1950/2000/2050
Operating Wavelength Range	nm	±10	±10	±30	±30	±30		±30
Working Distance	mm	5/50		5/50/100				
Beam Diameter	mm	≤0.6						
Insertion Loss (Max.)	dB	1.6	1.0	0.6	0.5	0.4		0.6
Return Loss (Min.)	dB	50						
Extinction Ratio (Min.)	dB	20						
Max Optical Power (CW)	W	0.1		0.5/1/5/10				
Fiber Type	-	PM460	PM630	PM780	PM980	PM1300	PM1550	PM1950
Working Axis		Slow Axis (Default) or Fast Axis or Both Axis						
Tensile Load (Max.)	N	5						
Package Dimensions	mm	Φ3.2 x L10 (Gold-Plated Tube), Φ2.8 x L9 (Glass Tube)						
Operating Temperature	°C	-5 to +70						
Storage Temperature	°C	-40 to +85						

Notes: Tested at 25 °C. Specifications exclude connectors. Adding connectors may cause wavelength-dependent variation in insertion loss; please contact us for detailed data. Return loss decreases by approximately 5 dB, and extinction ratio by 2 dB. The fiber slow axis is aligned to the key by default.

Product Dimensions



Ordering Information

Usage Type	Center Wavelength	Working Distance	Tube Type	Max Optical Power (CW)	Working Axis	Fiber Type	Pigtail Length	Pigtail Diameter	Connector
Single	532nm	5mm	Glass Tube	0.1W	Slow Axis	PM460	0.5m	250µm Bare Fiber	None
Matched Pair	630nm	50mm	Gold-Plated Tube	0.5W	Fast Axis	PM630	1.0m	900µm Loose Tube	LC/UPC
	670nm	100mm			Both Axis	PM780	1.5m		LC/APC
	780nm			5W		PM980	2.0m		SC/UPC
	830nm			10W		PM1300			SC/APC
	850nm					PM1550			FC/UPC
	980nm					PM1950			FC/APC
	1030nm								ST/UPC
	1064nm								ST/APC
	1310nm								
	1480nm								
	1550nm								
	1950nm								
	2000nm								
	2050nm								